

TENVIS Technology Co., LTD



# User Manual

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For MJPEG Cameras

Version: US 2.0

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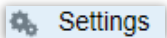
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Notice: Certain functions mentioned in this manual may vary according to camera's model. For example, pan and tilt function are for Pan/Tilt enabled cameras only.

# Basic Setup

For basic installation, please turn to **Operation Guide for Windows Web Browser** or **Operation Guide for Mac Web Browser** of Quick Start Guide and follow the manual step by step.

## Camera Settings

Click this Settings Button  for camera Settings.

Notice: Certain functions mentioned in this manual may vary according to camera's model. For example, pan and tilt function are for Pan/Tilt enabled cameras only.

## System

### About

Basic Device Information & Customer Service Information.

Alias	IPCamera
Device Hardware Version	Ver 1.8
Device Firmware Version	Ver 1.8.0.7
P2P Serial Number	FN4XAXR64S7BH56PYFXJ
MAC Address	00-12-34-ff-f8-81
Wi-Fi Status	Connected<---->RD
Select Language	English ▾

Alias	Camera's name
P2P Serial Number	Camera's P2P serial number
Device Hardware Version	Camera's hardware version
Device Firmware Version	Camera's firmware version
MAC Address	LAN MAC address
Wi-Fi Status	Wi-Fi Status

### System User

Adding and updating user accounts

	Username:	Password:
Administrator	admin	*****
Operator		
Guest		

Defined user contains three different user levels.

Different access is granted to different user levels as specified in the following sheet.

	Live Video	Record	Snapshots	Video adjustment	Sound	Talkback	PT operation	Settings
--	------------	--------	-----------	------------------	-------	----------	--------------	----------

Admin	√	√	√	√	√	√	√	√
Operator	√	√	√	√	√	√	√	×
Guest	√	√	√	×	√	√	×	×

## Network

### IP Config

The Camera's Basic Network Settings

Obtain IP address from DHCP server	Disable <input checked="" type="radio"/> Enable
IP Address	192.168.1.239
Subnet Mask	255.255.255.0
Gateway	192.168.1.1
DNS Server1	8.8.8.8
Web Port	7777

Obtain IP address from DHCP server	Enable or disable obtaining IP address from DHCP server automatically. If it is enabled, IP address and other items cannot be changed manually.
IP Address	Camera's local network IP address, which is used to view the camera in the same local area network. Specify a unique IP address for your network camera.
Net Mask	Specify the mask for the subnet the network camera is located on
Default Gateway	Specify the IP address of the default gateway (router) used for connecting devices attached to different networks and network segments
DNS Server	DNS (Domain Name Service) provides the translation of host names to IP addresses of your network
Web Port	Camera's communications port which is set to send video and audio data

### UPnp

Do port forwarding manually by UPnP	Disable <input checked="" type="radio"/> Enable
UPnP Status	Windows Find Successful ; Port Map Failed UPnP AddPortMap Error(the port may be used)!

Universal Plug and Play (UPnP) is an architecture for peer-to-peer network connectivity and it will connect to the IP camera from Internet more seamlessly




#### Notice:

As UPnP is also easily affected by router or firewall, sometimes it may show failed status. If this happens, please forward the camera's port on your router manually. Whether UPnP

succeeds or not, it will not affect the camera's remote access.

## Wi-Fi

Configuring Wi-Fi connection

Connection Status	Connected<---->RD
SSID	<input type="text"/> 

Connection Status	Check and change wireless network status
SSID	All the nearby wireless signals visible to the camera
Wi-Fi Password	The password or key of wireless network

For Set-up procedure please refer to **Wireless Setup**

## DDNS

Configuring the camera's DDNS for remote view

<b>Built-in DDNS</b>	
Enable Built-in DDNS	Disable <input checked="" type="checkbox"/> Enable
<b>Third-Party DDNS</b>	
DDNS Server	<input type="text" value="None"/>

Built-in DDNS Configuration	This IP Camera has been set with free default built-in DDNS. You can enable or disable it. If the DDNS status is "successful", you can view the camera from Internet after you forward the camera's port through your router.
Third-party DDNS Configuration	This camera supports third-party DDNS providers.



### Tips:

#### 1. What is DDNS?

DDNS (Dynamic DNS) is a service that maps Internet domain names to IP addresses. Thus we do not need to know the changing IP address in order to view the camera through the relevant DDNS server.

## Alarm Setting

### Alarm Setting

Enable Alarm	Disable <input checked="" type="checkbox"/> Enable
Sensitivity	3 Normal ▼
<b>Alarm Mode</b>	
Warning Tone	Disable <input checked="" type="checkbox"/> Enable
Alarm recording	Disable <input checked="" type="checkbox"/> Enable
E-Mail Alert	Disable <input checked="" type="checkbox"/> Enable
Upload Snapshots to FTP Server	Disable <input checked="" type="checkbox"/> Enable
Back to Preset	None ▼
Upload Interval (Seconds)	15
<b>Schedule</b>	
Schedule	Disable <input checked="" type="checkbox"/> Enable

Enable Alarm	Enable or disable the motion detection alarm
Sensitivity	The sensitivity of the motion detection alarm.
Warning Tone	It will get warning tone in Internet Explorer live video page
Email Alert	Sending alarm pictures to the specified email when the camera detects the movements
Upload Snapshots to FTP Server	Sending alarm pictures to FTP server set in advance when the camera detects movement.
Back to Preset	Moves camera to a preset position once the camera detects moving objects (this is only available for Pan/Tilt IP camera).
Upload Interval (Seconds)	Upload interval for uploading snapshots to FTP server
Schedule	Specified motion detection period with 15 minutes a unit and one week per cycle.

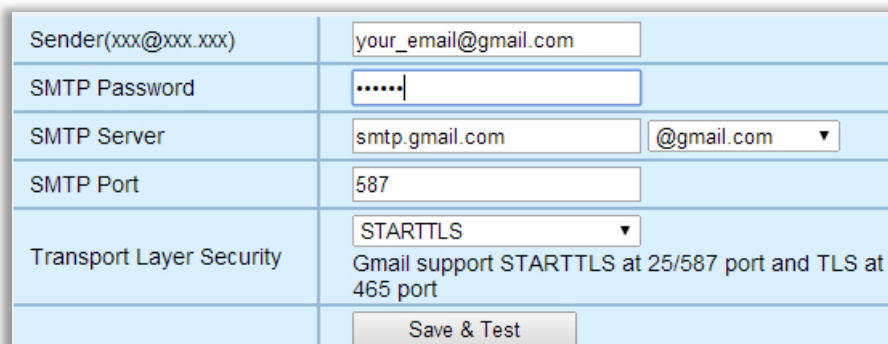
### Email Setting

Once the motion detection alarm is enabled, camera will send snapshots to sender email box itself when it detects the moving objects.

Sender(XXX@XXX.XXX)	<input type="text"/>
SMTP Password	<input type="password"/>
SMTP Server	<input type="text"/> ▼
SMTP Port	25
Transport Layer Security	TLS ▼ Gmail support STARTTLS at 25/587 port and TLS at 465 port
Save & Test	

Sender(xxx@xxx.xxx)	Email address for sending the alarm email
SMTP Server	Sending emails provider 's SMTP server address
SMTP Port	Service port of SMTP server
Transport Layer Security	Encryption protocol of SMTP Server
Need Authentication	Need to authenticate sender's right
SMTP Password	Sender email's login password

### E-mail Alarm Configuration



**Sender** is your own email address. Since common email providers have a better service experience and the built-in email provider SMTP servers are easier to set up, you are strongly advised to use Gmail, Yahoo and other common email services as the sender email.

**Sender** is also the email to accept the email alerts.

**SMTP Server:** The SMTP (short for Simple Mail Transfer Protocol) works like a post assistant, handling the sending of emails from the camera to an email server. SMTP Server receives outgoing mail messages from users to the mail recipients they are intended for.

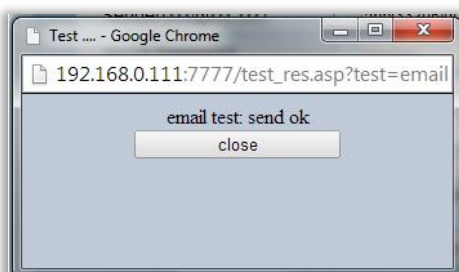
If your sender email provider is a public server, you can search the IP address of the email provider's SMTP server or DDNS from Google.

If your sender email provider is a private one, you can consult with the email provider's customer service.

**SMTP Port:** Service port of SMTP server which you can get with the above procedure

**Transport Layer Security:** Encryption protocol of SMTP Server and you can also get it from the above procedure

**SMTP Password:** The password you use to login to the SMTP server which is also the sender email password



Go back to alarm settings and enable **E-Mail Alert** to finish the whole e-mail alert settings.



Enable Alarm	Disable <input checked="" type="radio"/> Enable
Sensitivity	3 Normal ▼
<b>Alarm Mode</b>	
Warning Tone	Disable <input checked="" type="radio"/> Enable
Alarm recording	Disable <input checked="" type="radio"/> Enable
E-Mail Alert	Disable <input checked="" type="radio"/> Enable
Upload Snapshots to FTP Server	Disable <input checked="" type="radio"/> Enable
Back to Preset	None ▼
Upload Interval (Seconds)	15
<b>Schedule</b>	
Schedule	Disable <input checked="" type="radio"/> Enable



#### Notice:

1. Please try again if it shows "Can not connect to SMTP server!"
2. Please check the basic network settings of the camera if it failed the test.
3. There might be some delay for motion detection alarm since it is related to the network condition and the service quality of the sender email's provider. Thus it is beyond the control of IP camera.
4. If you still can not receive any email alert after getting the test email, please check your spam box and add your sender email address in the trust list of the recipient email once you find it in spam.



#### Tips:

The email alert is sent via sender email's provider server which is an SMTP server. Once the camera signs in to the SMTP server, the email alert will be delivered to the recipient email after getting SMTP server's authentication. Therefore, the sender email, recipient email and the SMTP server are all required.

## FTP Setting

FTP, short for File Transfer Protocol, is used to transfer files between computers on a network. You can upload camera's alarm snapshots to your FTP storage. Thus, there is no need to keep the computer on when the motion detection alarm is triggered.

FTP Server	<input type="text"/>
FTP Port	21
FTP User	<input type="text"/>
FTP Password	<input type="password"/>
FTP Upload Folder	/ <input type="text"/>
<input type="button" value="Save &amp; Test"/>	

FTP Server	FTP server's address
FTP Port (default 21)	FTP server's port
FTP User	FTP server's username
FTP Password	FTP server's password
FTP Upload Folder	The upload folder of FTP

### FTP Alarm Configuration

FTP Server	<input type="text" value="your.ftp.com"/>
FTP Port	<input type="text" value="21"/>
FTP User	<input type="text" value="test"/>
FTP Password	<input type="password" value="...."/>
FTP Upload Folder	<input type="text" value="/"/>
<input type="button" value="Save &amp; Test"/>	

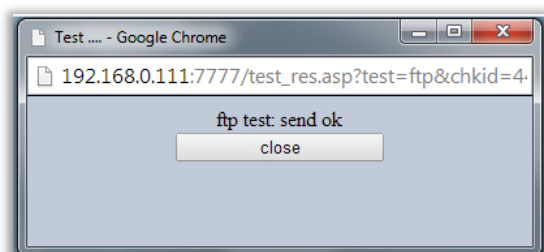
**FTP Server:** FTP server's IP address and DNS which could be required from FTP server provider.

**FTP Port:** Communication port of FTP server and the default port is 21.

**FTP User:** Username for you to sign in FTP server which could be required from FTP server provider.

**FTP Password:** Password for you to login FTP server which could be required from FTP server provider.

Then click Save and Test. Once it says "Succeed" that means the camera has set FTP settings successfully.



Go back to alarm settings and enable **Upload Snapshots to FTP Server** to finish the whole FTP alert settings.

Enable Alarm	Disable <input checked="" type="checkbox"/> Enable
Sensitivity	3 Normal ▼
<b>Alarm Mode</b>	
Warning Tone	Disable <input checked="" type="checkbox"/> Enable
Alarm recording	Disable <input checked="" type="checkbox"/> Enable
E-Mail Alert	Disable <input checked="" type="checkbox"/> Enable
Upload Snapshots to FTP Server	Disable <input checked="" type="checkbox"/> Enable
Back to Preset	None ▼
Upload Interval (Seconds)	15
<b>Schedule</b>	
Schedule	Disable <input checked="" type="checkbox"/> Enable



**Notice:**

1. Please check the basic network settings of the camera if failed in test.
2. FTP server is offered by FTP provider. We do not provide FTP service. Web Hosting usually supports FTP.
3. Please make sure the camera is authorized to upload alarm pictures. For detailed information, please consult with the FTP server provider.

## Multi-Camera

### Multi-Camera

Camera 1	[local camera]
Camera 2	<input type="text"/>
Local Search:	IPCAM44(192.168.2.94) ▼
IP Address:	192.168.2.94
Web Port	81
Username:	admin
Password:	•••••
Camera 3	<input type="text"/>
Camera 4	<input type="text"/>
Camera 5	<input type="text"/>
Camera 6	<input type="text"/>
Camera 7	<input type="text"/>
Camera 8	<input type="text"/>
Camera 9	<input type="text"/>

Local Search	All MJPEG IP camera in your local network
IP Address: Port	Camera's IP address or you can fill in DDNS instead.
Port	Camera's port
Username	Camera's username

Password	Camera's password
----------	-------------------

If you want to view multiple cameras from Internet by DDNS, you could add the camera with DDNS.

Camera 1	[local camera]
Camera 2	<input type="text"/> / ✕
Local Search:	IPCAM44(192.168.2.94) ▼
IP Address:	<input type="text" value="your.ddns.com"/>
Web Port	81
Username:	admin
Password:	•••••
Camera 3	<input type="text"/> / ✕
Camera 4	<input type="text"/> / ✕
Camera 5	<input type="text"/> / ✕
Camera 6	<input type="text"/> / ✕
Camera 7	<input type="text"/> / ✕
Camera 8	<input type="text"/> / ✕
Camera 9	<input type="text"/> / ✕



#### Notice:

This configuration is only available for IE browser.

## Advanced

### NTP Setting

Camera's time setting

Current Time	Sat Jan 1 08:07:03 GMT 2000 <input type="button" value="Sync with Host"/>
Time Zone	(GMT+08:00) China Coast, Hong Kong ▼
NTP Server	<input type="text" value="time.nist.gov"/> ex: <a href="http://time.nist.gov">time.nist.gov</a> <a href="http://ntp0.broad.mit.edu">ntp0.broad.mit.edu</a> <a href="http://time.stdtime.gov.tw">time.stdtime.gov.tw</a>
Automatic Calibration Time Interval(by hour)	24 ▼
Daylight saving time	128

Current Time	Camera's time and you can click Sync With PC to match it to your computer's time
Time Zone	Time zone of the place that the camera is located
NTP Server	Time server of the network which is connected with the camera
Automatic Calibration Time Interval(by hour)	To get current time from time server automatically by an interval time.
Daylight saving time	Add the correct time such as 60 or 30 if your are under daylight saving time.



#### Tips:

1. Since the camera has no built in battery, the time saved in its memory may be lost when the camera reboots and reset to default.

2. **What is NTP server?**

NTP server is a server computer that reads the actual time from a reference clock and distributes this information to its clients using network. Your camera will get the exact time through an NTP sever by offering the time zone of its location.

## Firmware Update

Update the device to the latest firmware version which can be found on our official website.

Restore to factory default	<input type="button" value="Restore to factory default"/>
Reboot	<input type="button" value="Reboot"/>
Update Device Firmware	<input type="button" value="Choose File"/> No file chosen <input type="button" value="Update"/>

Note:

1. Please choose proper update package according to product model of the camera.
2. Use cable network NOT Wi-Fi during the update process.
3. Make sure that the update process is operated under continuous power supply.
4. The whole process may take about 1 minute. Please wait until camera reboots.
5. Please operate under the guidance of professional personage in case of updating failure.
6. We are not responsible for any improper operation that leads to camera crash.

Restore to factory default	Restore the camera's settings to factory default
Reboot	Reboot the camera
Update Device Firmware	Update camera's firmware



#### Notice:

1. Please choose the appropriate firmware package based on your camera model.
2. Please ensure the camera is hard wired to your router via an ethernet cable.
3. Firmware updating... Please do not disconnect power supply or network connection while updating!
4. The entire update process takes about 1 minute. The camera will reboot once update complete
5. Please conduct firmware upgrade under professional guidance.

## Recording Path

Recording is only available for IE browser.

Record Path	F:\	Select&Save
Alarm Recording Path	G:\	Select&Save

Recording Path	Camera's destination folder to record to
Alarm Recording Path	Camera's destination folder to record to when the camera is alarming



#### Notice:

If it does not work, please run IE as administrator. Right click IE browser and pick Run as Administrator

## Other Setting

On Screen Display	Disable <input checked="" type="radio"/> Enable
Power Indicator LED	<input type="radio"/> Disable <input type="radio"/> Enable <input checked="" type="radio"/> Flicker
Go preset position on booting	<--Select--> ▼
Pan/Tilt speed	3 Normal ▼

On Screen Display	Show camera's information on video
Power indicator LED	Control camera's front green LED
Pan/Tilt speed	Set up camera's Pan/Tilt speed
Go preset position on booting	Enable or disable go preset position on booting



#### Tips:

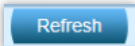
#### What are preset positions?

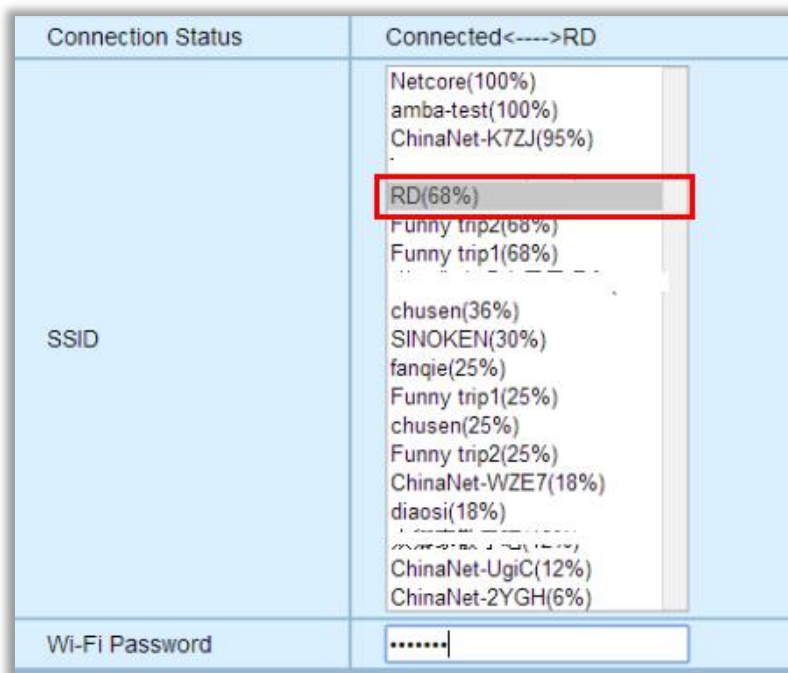
Preset positions are IP camera's memorized P/T positions. Once you set a preset position, you do not need to pan the camera to your preferred position. You simply press the preset button that corresponds to the preset you want to see and the camera will move to that position automatically.

## Wireless Settings

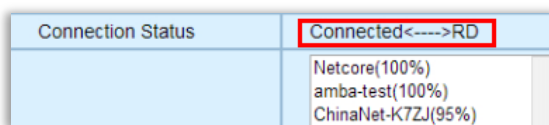
1. Go to Wi-Fi setting page.

Connection Status	Connected<---->RD
SSID	<input type="text"/> 

2. Click  Rescan in Wireless Network and pick your preferred WI-FI SSID. Fill in the wireless network password. Click Save and wait for camera reboot.



3. After reboot, if Connection Status shows the SSID that means the camera has connected to the wireless network successfully.



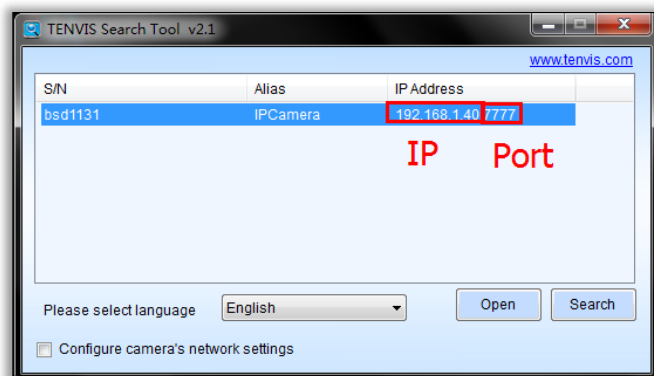
#### Tips:

For security concern, please set your Wi-Fi network as WEP encryption or OPEN.

## Port Forwarding of Common Routers

Before you set up port forwarding manually, please check 2 things before you do it.

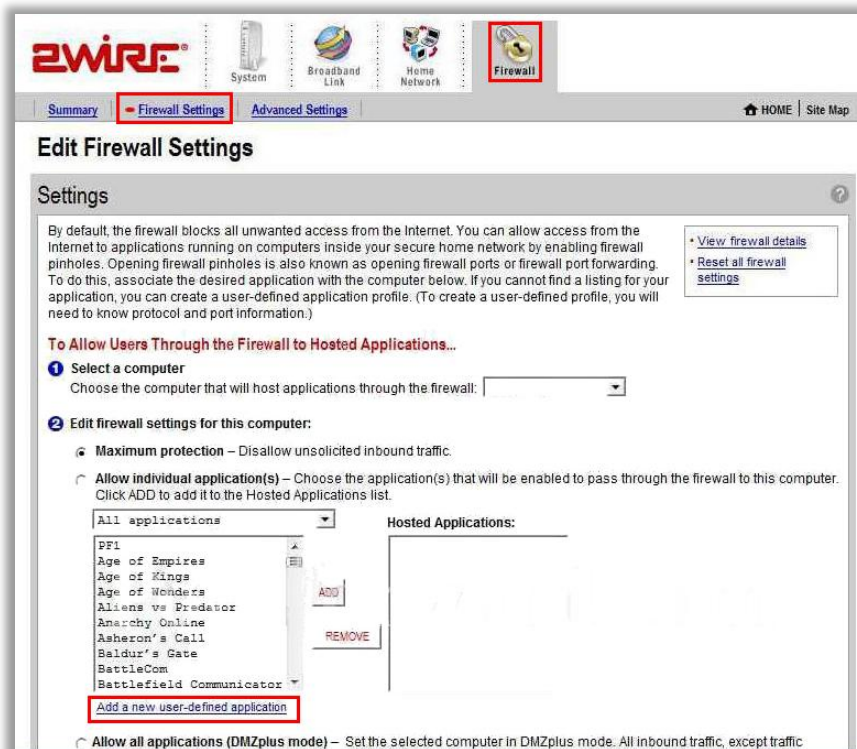
1. Make sure you know the router's brand, access URL, username and password. If you do not know them, please get help from the provider of the router, such as your ISP.
2. Find your camera's IP address and port. You can find them in your search tool.



The IP and port of the camera is very important for port forwarding.

## For 2wireRouter

1. Open a web browser like Internet Explorer, Chrome, Firefox & etc. Enter the internal IP address of your router in the address bar of your browser. The default URL is <http://192.168.1.1>
2. Click the **Firewall Settings** button, and then click **Add a new user-defined application**



3. Add a new user-defined application.



The screenshot shows the Z-Wire Firewall configuration interface. At the top, there are icons for System, Broadband Link, Home Network, and Firewall. Below these are tabs for Summary, Firewall Settings (which is active), and Advanced Settings. The main heading is 'Edit Application'. Under 'Settings', there are three sections: 'Profile Name' with a text input field containing 'IP Camera'; 'Definition' with instructions and a note; and configuration fields for Protocol (TCP selected), Port (From: 81, To: 81), Protocol Timeout (86400 seconds), Map to Host Port (empty), and Application Type (None (Default)). A red box highlights the 'ADD DEFINITION' button at the bottom. A 'BACK' button is also visible.

**2WIRE®**

System Broadband Link Home Network Firewall

Summary **Firewall Settings** Advanced Settings

## Edit Application

### Settings

**Profile Name**  
Enter a name for the application profile that you are creating.

Application Name:

---

**Definition**  
Choose a protocol and enter the port(s) for this application, then click ADD DEFINITION to add the definition to the Definition List. If the application requires multiple ports or both TCP and UDP ports, you will need to add multiple definitions.

**Note:** In some rare instances, certain application types require specialized firewall changes in addition to simple port forwarding. If the application you are adding appears in the application type menu below, it is recommended that you select it.

Protocol: ☒ TCP ☐ UDP

Port (or Range): From:  To:

Protocol Timeout (seconds):  TCP default 86400  
UDP default 600

Map to Host Port:  Default = the same port as defined above.

Application Type:

**ADD DEFINITION**

**BACK**

**Application Name:** It is just a name whatever you want for port forwarding,

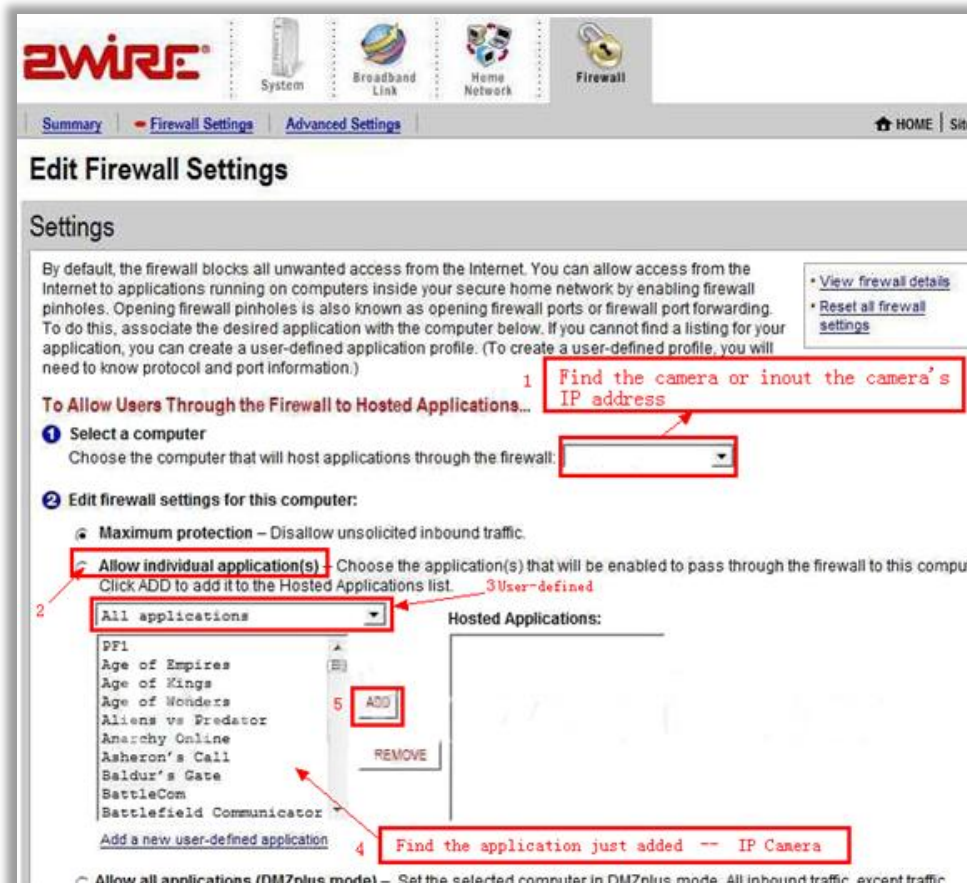
**Protocol:** TCP

**Port for range:** port of the camera

**Protocol timeout:** 86400

Click **Add**.

4. Sign the application for the IP Camera



### Select Computer

Select the IP camera in the list. You could choose the IP address or input the camera's IP address; it depends on the router's model.

### Select **allow individual application**

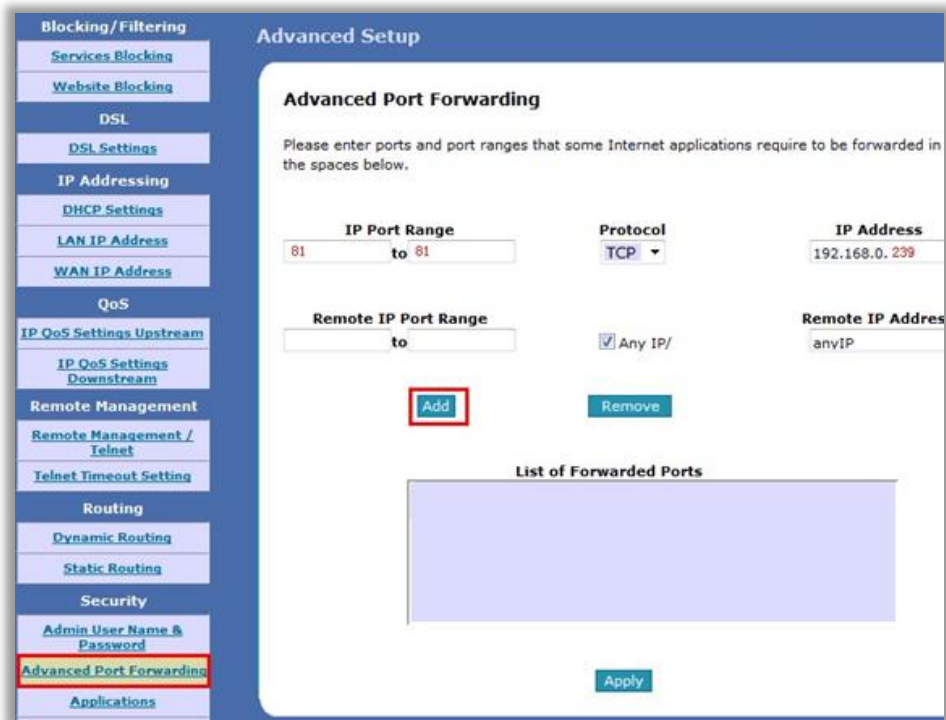
Select **User-defined**

Find your application you just added.

Click **Add**

### For Actiontec Routers

1. Open a web browser like Internet Explorer or Chrome. Enter the internal IP address of your router in the address bar of your browser. For these routers, in general, it is <http://192.168.0.1>
2. Click **Advanced Port Forwarding**



**IP Port Range:** The camera's port.

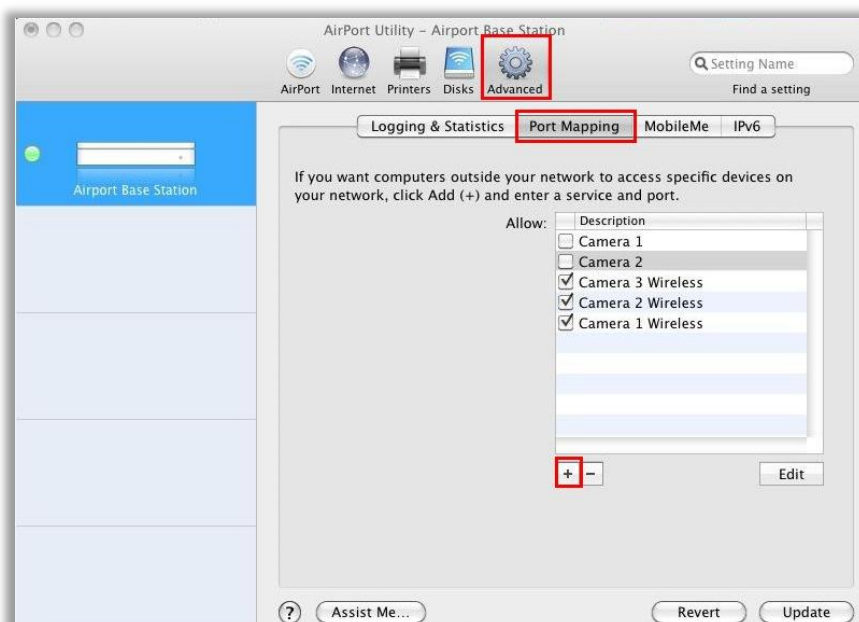
**Protocol:** TCP

**IP Address:** The camera's IP address.

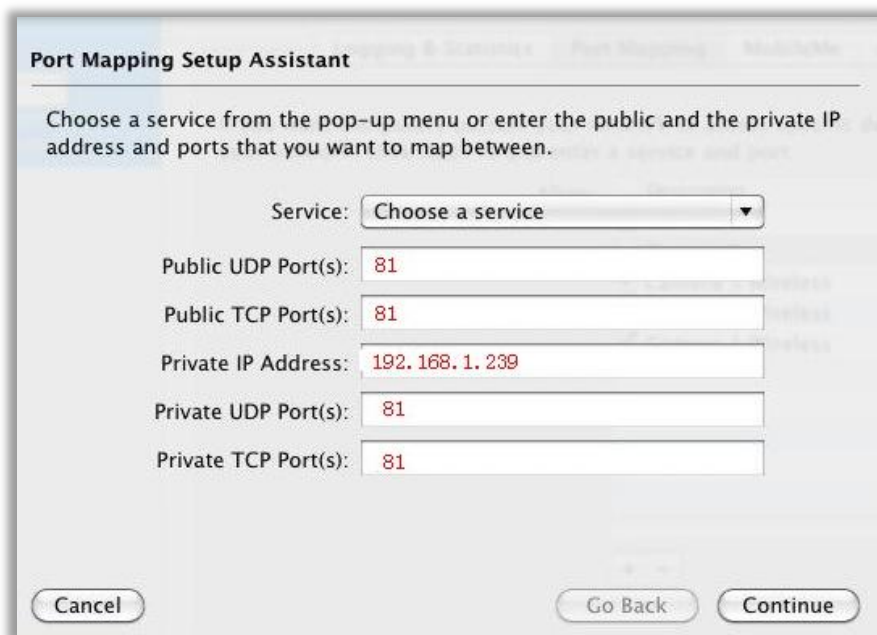
Click **Apply**

## For Apple Airport Extreme or Time Capsule

1. Go to your finder and type in Airport in the search bar and find your Airport Utility program.
2. Find the Advanced Tab at the top and select it
3. Choose the Port Mapping option.



Add a service for IP camera.



The 'Port Mapping Setup Assistant' dialog box is shown. It has a title bar with 'Port Mapping Setup Assistant' and a breadcrumb trail 'Networking & Settings > Port Mapping > Multiple'. The main instruction says: 'Choose a service from the pop-up menu or enter the public and the private IP address and ports that you want to map between.' The form contains the following fields: 'Service:' with a dropdown menu showing 'Choose a service'; 'Public UDP Port(s):' with text '81'; 'Public TCP Port(s):' with text '81'; 'Private IP Address:' with text '192.168.1.239'; 'Private UDP Port(s):' with text '81'; and 'Private TCP Port(s):' with text '81'. At the bottom are three buttons: 'Cancel', 'Go Back', and 'Continue'.

**Service:** Choose a service

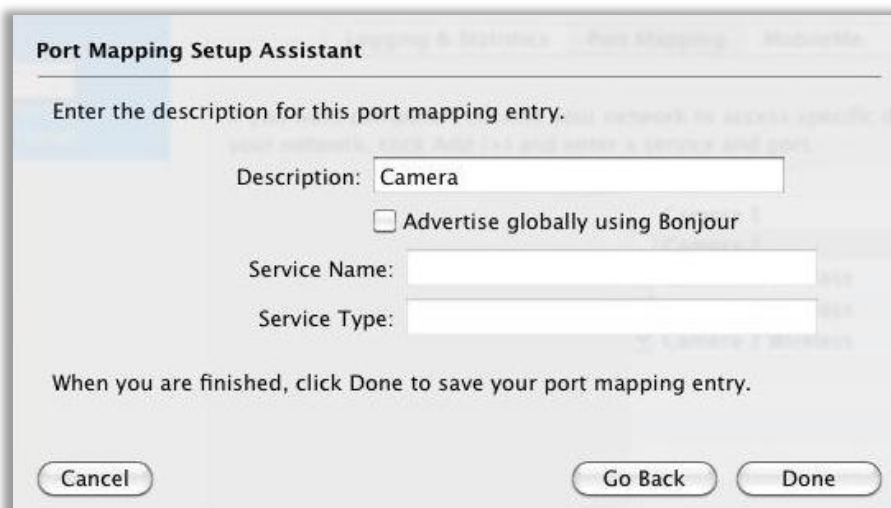
**Public UDP Ports:** the camera's port

**Public TCP ports:** the camera's port

**Private IP Address:** the camera's IP address

**Private UDP ports:** the camera's port

**Private TCP ports:** the camera's port



The 'Port Mapping Setup Assistant' dialog box is shown. It has a title bar with 'Port Mapping Setup Assistant' and a breadcrumb trail 'Networking & Settings > Port Mapping > Multiple'. The main instruction says: 'Enter the description for this port mapping entry.' The form contains the following fields: 'Description:' with text 'Camera'; a checkbox labeled 'Advertise globally using Bonjour' which is unchecked; 'Service Name:' with an empty text field; and 'Service Type:' with an empty text field. At the bottom are three buttons: 'Cancel', 'Go Back', and 'Done'. A note at the bottom says: 'When you are finished, click Done to save your port mapping entry.'

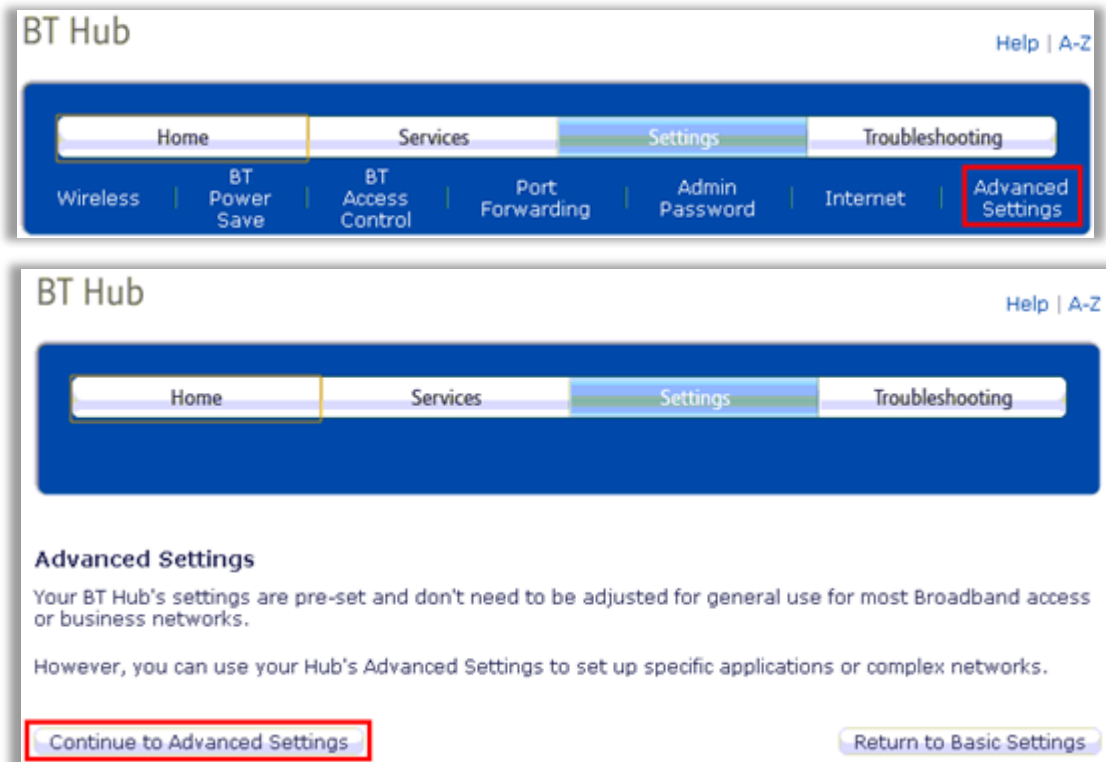


**Tips:**

Be sure to click on the Update button after making these changes to upload them to your Airport.

## For BT BTHomeHub Routers

1. Open a web browser like Internet Explorer, Chrome, Firefox & etc. Enter the internal IP address of your router in the address bar of your browser. For BT routers, in general, it is <http://192.168.1.254>
2. Click **Advanced Settings** and Continue to Advanced Settings



3. Click **Supported Applications** and **Add new game or application**

BT Hub Help | A-Z

---

Home | Services | **Settings** | Troubleshooting

Wireless | Broadband | Static IP | Business Network | **Port Forwarding** | System | Basic Settings

---

Configuration | **Supported Applications** | UPnP | DMZ | Firewall

---

### Add User Defined Game or Application

Game/application name:

Copy an existing game/application: ☒ Yes ☐ No

▼

---

### Game or Application Definition

A game or application is made up of one or more TCP/UDP port ranges. Each incoming port range can be translated into a different internal (private network) port range.

Protocol	Port Range	Translate To	
<input type="text" value="Any"/> ▼	<input type="text" value="81"/> - <input type="text" value="81"/>	<input type="text" value="81"/> - <input type="text" value="81"/>	<input type="button" value="Add"/>

No port maps defined for this game or application

**Game/Application name:** It is just a name whatever you want for port forwarding,

**Protocol:** Any or TCP

**Port Range:** The port of the camera

4. Click Configuration; Select the application you just added in Game or Application List.

Select User Defended IP Address in the **Device** List.

Enter the camera's IP address into **Device IP Address**.



BT Hub Help | A-Z

---

Home | Services | **Settings** | Troubleshooting

Wireless | Broadband | Static IP | Business Network | **Port Forwarding** | System | Basic Settings

**Configuration** | Supported Applications | UPnP | DMZ | Firewall

---

### Port Forwarding

Port Forwarding is used by devices, such as games consoles, and applications, such as servers, to make sure that data coming from the Internet gets to the device that needs to use it. When Port Forwarding is enabled, your BT Hub will send all incoming traffic for that application or game to the chosen device.

**Game or Application:** ipcamera **Device:** User Defined IP Address

Device IP Address: 192.168.1.239 Add

Apply Cancel

## For D-link Routers

1. Open a web browser like Internet Explorer or Chrome. Enter the internal IP address of your router in the address bar of your browser. For D-link routers, in general, it is <http://192.168.0.1>
2. Click **Advanced - Virtual Server**

SETUP | **1 ADVANCED** | TOOLS | STATUS

---

### VIRTUAL SERVER

6 The Virtual Server option allows you to define a single public port on your router for redirection to an internal LAN IP Address and Private LAN port if required. This feature is useful for hosting online services such as FTP or Web Servers.

Save Settings Don't Save Settings

---

### 24--VIRTUAL SERVERS LIST

	Port	Traffic Type	Schedule
<div style="border: 1px solid red; padding: 2px;"> <input checked="" type="checkbox"/> <b>IP Camera</b>            IP Address: 192.168.0.239         </div>	<div style="border: 1px solid red; padding: 2px;">           Public: 81            Private: 81         </div>	<div style="border: 1px solid red; padding: 2px;">           Protocol: TCP            Port: 81         </div>	<div style="border: 1px solid red; padding: 2px;">           Schedule: Always            Inbound Filter: Allow All         </div>

**Name:** It is just a name whatever you want for port forwarding,

**Public:** the camera's port

**Private:** the camera's port

**Protocol:** TCP

**Schedule:** Always

**Inbound Filter:** Allow All

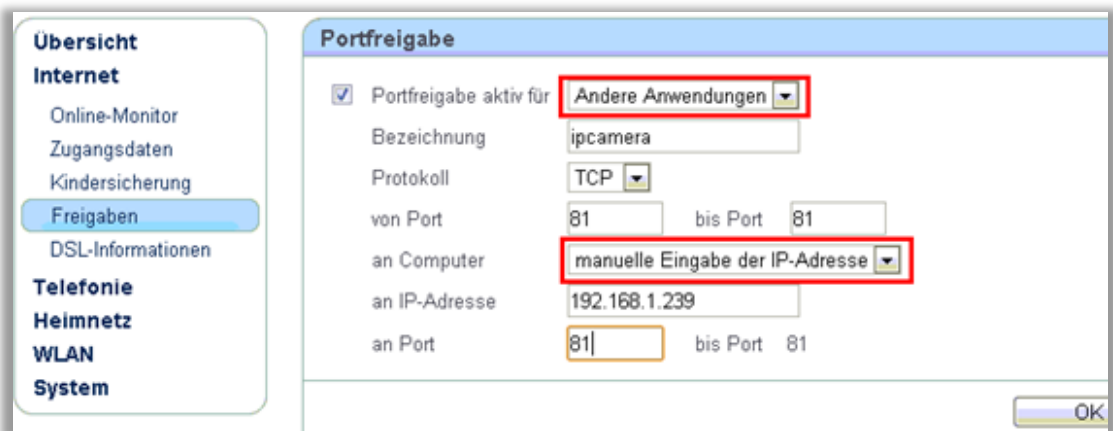
Click **Save Settings**

## For FRITZ!! Routers

1. Open a web browser like Internet Explorer or Chrome. Enter the internal IP address of your router in the address bar of your browser to login your camera. By default the IP address should be set to http://192.168.178.1
2. Click the Internet link and then click **Portfreigabe**. In the **portfreigabe**, click **Neue Portfreigabe**.



3. Do port forwarding



Select **Andere Anwendungen** from the **Portfreigabe aktiv fur** drop down box.

**Bezeichnung:** A name, whatever you want

**Protokoll:** TCP

**von Port:** The camera's port

**bis Port:** The camera's port

**an Computer:** manuelle Eingabe der IP-Adresse

**an IP-Adresse:** The camera's IP address

**an Port:** The camera's port

## ForHuawei Routers

1. Enter the internal IP address of your router in the address bar of web browser. For these



routers, in general, it is http://192.168.1.1

2. Click **Advanced - NAT**, and click **Port Mapping**

**Name:** Whatever you want, it is just a name, e.g. TENVIS IP Camera

**Public:** the camera's http port, e.g. 81

**Private:** the camera's http port, e.g. 81

**Protocol:** TCP

**Schedule:** Always

**Inbound Filter:** Allow All

Click **Save Settings**

## For Linksys W Series Routers

1. Enter the internal IP address of your router in the address bar of web browser. For these Series routers, in general, it is http://192.168.1.1
2. Click **Application & Gaming** and click **Single Port Forwarding**

External Port	Internal Port	Protocol	To IP address	Enabled
---	---	---	192 . 168 . 1 . 0	<input type="checkbox"/>
---	---	---	192 . 168 . 1 . 0	<input type="checkbox"/>
---	---	---	192 . 168 . 1 . 0	<input type="checkbox"/>
---	---	---	192 . 168 . 1 . 0	<input type="checkbox"/>
---	---	---	192 . 168 . 1 . 0	<input type="checkbox"/>
81	81	TCP	192 . 168 . 1 . 239	<input checked="" type="checkbox"/>
		TCP	192 . 168 . 1 . 0	<input type="checkbox"/>
		TCP	192 . 168 . 1 . 0	<input type="checkbox"/>
		TCP	192 . 168 . 1 . 0	<input type="checkbox"/>

**Application Game:** It is just a name whatever you want for port forwarding,

**External Port:** the camera's port

**Internal Port:** the camera's port

**Protocol:** TCP

**To IP address:** the camera's IP address

**Enabled:** Enable

## For Movistar Routers

1. Enter the internal IP address of your router in the address bar of web browser. For these routers, in general, it is <http://192.168.1.1>
2. Click **Firewall - Port Forwarding**

**TECOM ADSL Router**

**Port Forwarding**

Entries in this table allow you to automatically redirect common network services to a specific machine behind the NAT firewall. These settings are only necessary if you wish to host some sort of server like a web server or mail server on the private local network behind your Gateway's NAT firewall.

Port Forwarding: ☐ Disable ☒ Enable

Protocol:  Comment:  ☒ Enable

Remote IP Address:  Public Port:  -

Local IP Address:  Local Port:  -

Interface:

**Current Port Forwarding Table:**

Select	Local IP Address	Protocol	Local Port	Comment	Enable	Remote Host	Public Port	Interface
<input type="checkbox"/>	192.168.1.33	TCP+UDP	23023		Enable		23023	ppp0

**Comment:** It is just a name whatever you want for port forwarding,

**Public Port:** the camera's port

**Local Port:** the camera's port

**Remote IP Address:** N/A

**Local IP Address:** the camera's IP address

Click **Add**

## For Netgear Routers 1

1. Enter the internal IP address of your router in the address bar of web browser. For these routers, in general, it is <http://192.168.1.254>
2. Click **Port Forwarding/Port Triggering** or **Port Forwarding**. Select **Port Forwarding** and select **Add Custom Service**

**NETGEAR**  
SMARTWIZARD router manager  
54 Mbps Wireless Router model WGR614v9

- Schedule
- Maintenance
  - Router Status
  - Attached Devices
  - Backup Settings
  - Set Password
  - Router Upgrade
- Advanced
  - Wireless Settings
  - Wireless Repeating Function
  - Port Forwarding / Port Triggering**
  - WAN Setup
  - LAN Setup

### Port Forwarding / Port Triggering

Please select the service type

☒ Port Forwarding  
☐ Port Triggering

Service Name:  Server IP Address:

#	Service Name	Start Port	End Port	Server IP Address
<input type="button" value="Edit Service"/> <input type="button" value="Delete Service"/> <input type="button" value="Add Custom Service"/>				

Or

### Port Forwarding

Active Forwarding Rules

Name	Start Port	End Port	Protocol	Local IP Address
Choose Predefined Service Service: <input type="text" value="-SERVICES-"/>				
<b>Add Custom Rules</b>				
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text" value="Both"/>	<input type="text" value="192.168.0.1"/>
<input type="button" value="Add"/> <input type="button" value="Delete"/> <input type="button" value="Reset"/>				

**Setup**

- Basic Settings
- Wireless Settings
- WPS Settings
- Wi-Fi Multimedia

**Maintenance**

- Gateway Status
- Connection
- Set Password
- Backup
- Event Log
- Diagnostics

**Advanced**

- Wireless Settings
- Dynamic DNS
- MAC Filtering
- IP Filtering
- Port Blocking
- Port Forwarding**
- Port Triggering

### Port Forwarding

Active Forwarding Rules				
Name	Start Port	End Port	Protocol	Local IP Address

Choose Predefined Service  
Service: -SERVICES-

**Add Custom Rules**

Name	Start Port	End Port	Protocol	Local IP Address
			Both	192.168.0.1

Add
Delete
Reset

3. Do port forwarding

NETGEAR

**router manager**  
54 Mbps Wireless Router model WGR614

**Maintenance**

- Block Services
- Schedule
- E-mail

**Advanced**

- Router Status
- Attached Devices
- Backup Settings
- Set Password
- Router Upgrade
- Wireless Settings
- Port Forwarding / Port Triggering**
- WAN Setup

### Ports - Custom Services

Service Name

IP Camera

Service Type

TCP/UDP

Starting Port

81 (1~65534)

Ending Port

81 (1~65534)

Server IP Address

192
168
1
239

Apply
Cancel

Or



**Setup**

- Basic Settings
- Wireless Settings
- WPS Settings
- Wi-Fi Multimedia

**Maintenance**

- Gateway Status
- Connection
- Set Password
- Backup
- Event Log
- Diagnostics

**Advanced**

- Wireless Settings
- Dynamic DNS
- MAC Filtering
- IP Filtering
- Port Blocking
- Port Forwarding**
- Port Triggering

### Port Forwarding

Active Forwarding Rules				
Name	Start Port	End Port	Protocol	Local IP Address
Choose Predefined Service				
Service: [-SERVICES-]				

**Add Custom Rules**

Name	Start Port	End Port	Protocol	Local IP Address
IPCamera	81	81	Both	192.168.1.239

**Add** Delete Reset

**Service Name:** It is just a name whatever you want for port forwarding,

**Starting Port:** port of the camera

**Ending Port:** port of the camera

**Service IP Address:** IP of the camera

## For Netgear Routers 2

1. Enter the internal IP address of your router in the address bar of your browser. For these routers, in general, it is <http://192.168.1.254>
2. Click the **Services** link and Click **Add Custom Service** button.

**Setup Wizard**

- Setup
  - Basic Settings
  - ADSL Settings
  - Wireless Settings
- Content Filtering
- Logs
- Block Sites
- Firewall Rules
- Services**
- Schedule
- E-mail

### Services

Service Table		
#	Name	Service Type
Add Custom Service Edit Service		

3. Add an IP camera service

**Name:** Whatever you want

**Type:** TCP

**Start Port:** The camera's port

**End Port:** The camera's port

4. Click the **Firewall Rules** link; and then click the **Inbound Services Add** button.

5. Add the user-defined IP Service in **Inbound Services**.

**Service:** Select the service you added in Service settings

**Action:** Allow always

**Send to LAN Server:** The IP of the IP Camera

**Wan User:** Any

**Log:** Always or None

### For Netgear Routers 3

1. Enter the internal IP address of your router in the address bar of web browser. For these routers, in general, it is http://192.168.1.254
2. Click the **Port Forwarding / Port Triggering** link and Click **Add Custom Service** button.

**Port Forwarding / Port Triggering**

Please select the service type

☒ Port Forwarding  
☐ Port Triggering

Service Name: AIM Server IP Address: 192 . 168 . 1

#	Service Name	Start Port	End Port
1	utorrent	6821	6821
2	AIM	5190	5190
3	DC	6789	6789

Edit Service Delete Service

**Add Custom Service**

3. Add a customer service for the camera

**Ports - Custom Services**

Service Name: ip camera

Service Type: TCP/UDP

Starting Port: 81 (1~65534)

Ending Port: 81 (1~65534)

Server IP Address: 192 . 168 . 1 . 239

Apply Cancel

**Name:** It is just a name, whatever you want for port forwarding,

**Type:** TCP

**Start Port:** The camera's port

**End Port:** The camera's port

**Server IP Address:** The camera's IP address

## For O2/ Thomson routers

1. Open <http://192.168.1.254> in a web browser. If you are prompted for a login, the username is "Administrator" and the password is the serial number of your router (printed on its underside, excluding the bit in brackets).
2. Click **Toolbox > Game & Application Sharing > Create a new game or application**.

### Pick a task

- > Assign a game or application to a local network device
- > **Create a new game or application**
- > Modify a game or application

3. Enter the name of your application, e.g. IP Camera, click "Manual Entry of Port Maps", and then click Next.

### New Game or Application

Enter the name of the new game or application.

Name:

IP Camera

Select how you want to define the new game or application.

☐ Clone Existing Game or Application

ABC (Another Bittorent Client)

☒ Manual Entry of Port Maps

Next

Cancel

4. Select the protocol of your application from the drop down list under Protocol option. Enter port number of your camera in the two text boxes under Port Range option, and then click Add. Repeat this step for all the ports you need to forward.

Protocol	Port Range	Translate To ...	Trigger Protocol	Trigger Port
No port maps defined for this game or application.				
TCP	81 to 81		Any	
<b>Add</b>				



5. Click **Assign a game or application to a local network device**.

**Pick a task**  

[> Assign a game or application to a local network device](#)  
[> Create a new game or application](#)

6. Select your newly created application in "Game or Application", e.g. "IP Camera" select your device in Device or select User Define and input the camera's IP address, e.g. "192.168.1.239", then click Add.

Game or Application	Device	Log
No games or applications assigned.		
IP Camera	User Define	<input type="checkbox"/>
IP		192.168.1.239
<input type="button" value="Add"/>		

### For Sky/Sagmen Routers

1. Enter the internal IP address of your router in the address bar of web browser. For Sky/Sagmen routers, in general, it is http://192.168.0.1
2. Click **SECURITY - SERVICE**, and click **ADD CUSTOM SERVICE**

SETUP | SECURITY | MAINTENANCE | ADVANCED

LOGS | BLOCK SITES | FIREWALL RULES | SERVICES | SCHEDULE

## BROADBAND SETUP

### SERVICES

Service Table

#	Service Type	Ports
---	--------------	-------

3. Add a Custom Service

SETUP | SECURITY | MAINTENANCE | ADVANCED

LOGS | BLOCK SITES | FIREWALL RULES | SERVICES | SCHEDULE

## BROADBAND SETUP

### SERVICES - ADD CUSTOM SERVICE - PORT FORWARDING

Service Definition

Name:

Type:

Start Port:

Finish Port:

**Name:** It is just a name whatever you want for port forwarding,

**Start Port:** the camera's port

**Finish Port:** the camera's port1

**Type:** TCP

Click **APPLY**

- Click **SECURITY - FIREWALL RULES - INBOUND SERVICE**, add the service to the camera

SETUP | SECURITY | MAINTENANCE | ADVANCED

LOGS | BLOCK SITES | FIREWALL RULES | SERVICES | SCHEDULE

## BROADBAND SETUP

### FIREWALL RULES - INBOUND SERVICES

Service	TENVIS (81:81)					
Action	ALLOW always					
Send to LAN Server:	192	168	0	239		
WAN Users	Any					
Start:	0	0	0	0		
Finish:	0	0	0	0		
Log	Never					

**Service:** Select the service you just added.

**Action:** ALLOW always

**Send to LAN Server:** The camera's IP address

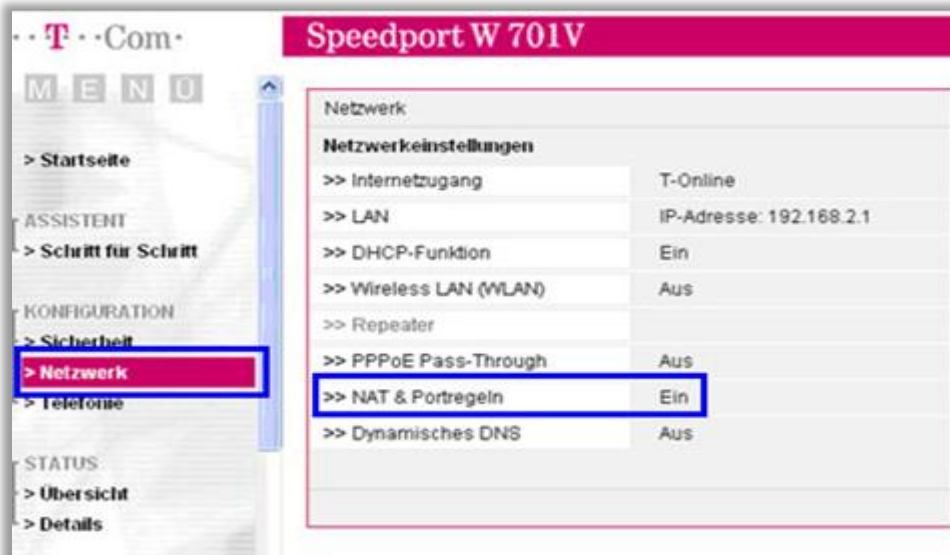
**WAN Users:** Any

**Log:** Never

Click **APPLY**

## For Speedport Routers 1

1. Login your router. Click **Netzwerk** and **NAT & Portregeln**.



2. Click **Neue Regel anlegen**



3. Set port forwarding.



**Bezeichnung:** A name for port forwarding

**IP-Adresse:** The camera's IP address

**Protokoll:** TCP

**Ports:** The camera's port

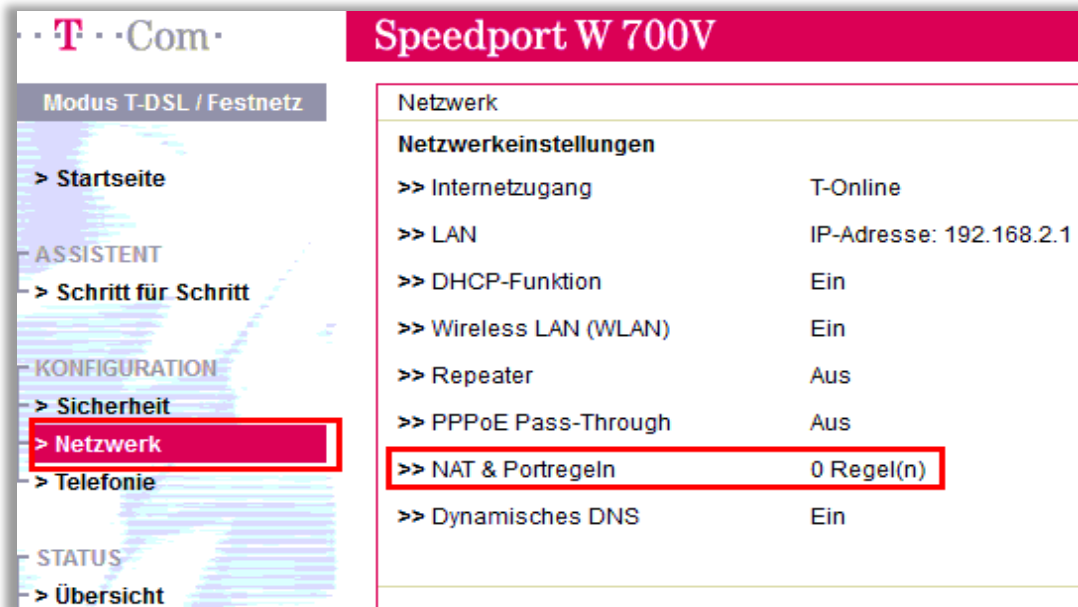
**Ports:** The camera's port

4. Then the camera has been forwarded to Internet.

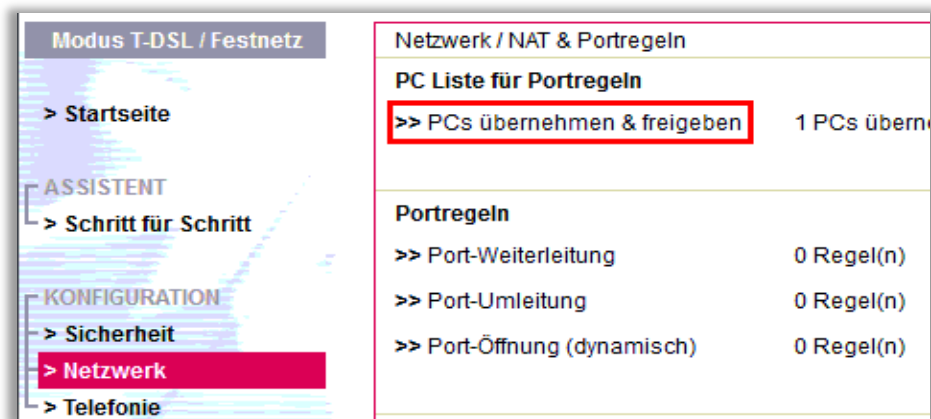


## For Speedport (Deutsch) Routers 2

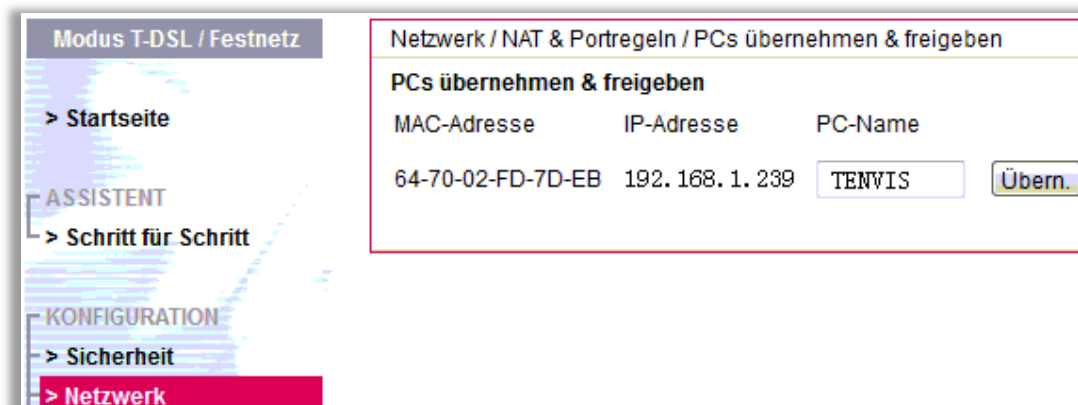
1. Enter the internal IP address of your router in the address bar of web browser. For these routers, in general, it is `http://192.168.1.1`
2. Click **Netzwerk - Nat & Portregeln**, and click **ADD CUSTOM SERVICE**



3. Click **PCs übernehmen & freigeben**



4. Find your IP camera here and Add PC-Name to the camera



5. Click **SECURITY - FIREWALLRULES**, add the service to the camera

Modus T-DSL / Festnetz	
<ul style="list-style-type: none"> <li>&gt; Startseite</li> <li>ASSISTENT</li> <li>&gt; Schritt für Schritt</li> <li>KONFIGURATION</li> <li>&gt; Sicherheit</li> <li>&gt; <b>Netzwerk</b></li> <li>&gt; Telefonie</li> </ul>	Netzwerk / NAT & Portregeln
	PC Liste für Portregeln
	>> PCs übernehmen & freigeben      1 PCs übernommen
	Portregeln
	>> <b>Port-Weiterleitung</b> 0 Regel(n)
	>> Port-Umleitung      0 Regel(n)
	>> Port-Öffnung (dynamisch)      0 Regel(n)

6. Select **Neue Regel definieren**

Modus T-DSL / Festnetz	
<ul style="list-style-type: none"> <li>&gt; Startseite</li> <li>ASSISTENT</li> <li>&gt; Schritt für Schritt</li> <li>KONFIGURATION</li> <li>&gt; Sicherheit</li> <li>&gt; <b>Netzwerk</b></li> <li>&gt; Telefonie</li> <li>STATUS</li> <li>&gt; Übersicht</li> <li>&gt; Details</li> </ul>	Netzwerk / NAT & Portregeln / Port-Weiterleitung
	Port-Weiterleitung
	>> <b>Neue Regel definieren</b>
	>> Neue Regel definieren
	>> Neue Regel definieren
	>> Neue Regel definieren
	>> Neue Regel definieren
	>> Neue Regel definieren
	>> Neue Regel definieren
	>> Neue Regel definieren

7. Set port forwarding

**Bezeichnung:** It is just a name whatever you want for port forwarding

**Gültig für PC:** Select the camera you just added

**TCP:** The camera's port

## For TP-Link Routers 1

1. Enter the internal IP address of your router in the address bar of your browser. For TP-link routers, in general, it is <http://192.168.1.1>
2. Click **Forwarding - Virtual Servers**

3. Set port forwarding

**Add or Modify a Virtual Server Entry**

Service Port:  (XX-XX or XX)

Internal Port:  (XX, Only valid for single Service Port or leave it blank)

IP Address:

Protocol:

Status:

Common Service Port:

**Service Port:** the camera's port

**Internal Port:** the camera's port

**IP Address:** the camera's IP address

**Protocol:** ALL or TCP

**Status:** Enabled

Click **Save**

## For TP-Link / Binatone Routers

1. Open a web browser like Internet Explorer or Chrome. Enter the internal IP address of your router in the address bar of your browser. For these routers, in general, it is <http://192.168.1.1>
2. Click **Advanced Setup - Virtual Servers**

**Advanced** Quick Start Interface Setup **Advanced Setup** Access Management Maintenance

Firewall Routing NAT QoS VLAN ADSL

**NAT**

Virtual Circuit :

NAT Status : Activated

Number of IPs : ☒ Single ☐ Multiple

3. Set port forwarding



**Virtual Server**

Virtual Server for : Single IP Account

Rule Index : 1

Application : tennis

Protocol : ALL

Start Port Number : 81

End Port Number : 81

Local IP Address : 192.168.1.239

**Application:** A name for port forwarding, e.g. TENNIS

**Protocol:** ALL or TCP

**Start Port Number:** the camera's http port, e.g. 81

**End Port Number:** the camera's http port, e.g. 81

**Local IP Address:** the camera's IP address, e.g.192.168.1.239

Click **Save**

## For Virgin Routers 1

1. Enter the internal IP address of your router in the address bar of web browser. For these routers, in general, it is http://192.168.0.1 or http://192.168.0.254
2. Click **Advanced - Port Forwarding**

**Virgin media**

**Port Forwarding**

**Active Forwarding Rules**

	Name	Start Port	End Port	Protocol	Local IP Address
<input type="radio"/>	ip 1	81	81	Both	192.168.0.239
<input type="radio"/>	ip 2	82	82	Both	192.168.0.240

**Choose Predefined Service**

Service: -SERVICES-

**Add Custom Rules**

Name	Start Port	End Port	Protocol	Local IP Address
TENNIS	81	81	Both	192.168.0.239

**Add** **Delete** **Reset**

**Name:** A name whatever you want for port forwarding

**Start Port:** the camera's port

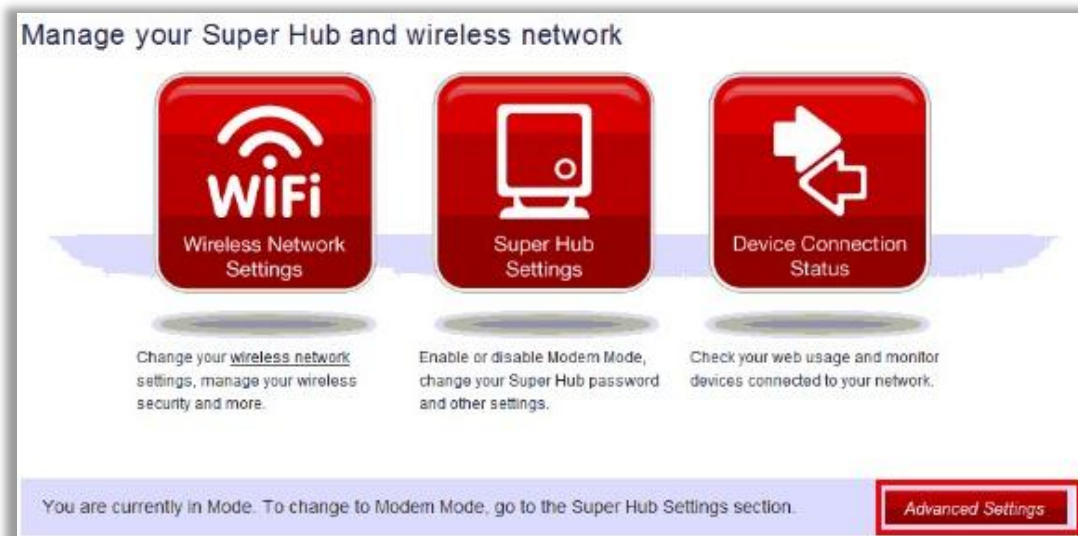
**End Port:** the camera's port

**Local IP Address:** the camera's IP address

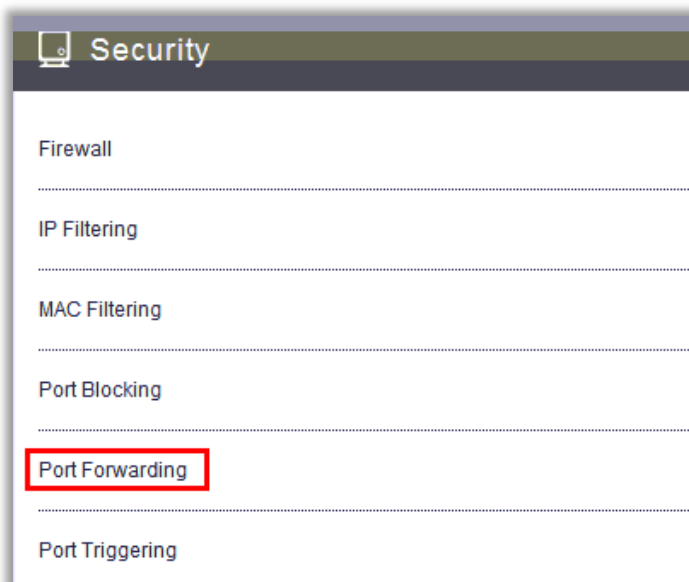
Click **Add**

## For Virgin Routers 2

1. Enter the internal IP address of your router in the address bar of web browser. For these routers, in general, it is <http://192.168.0.1>
2. Click **Advanced Settings**



3. Select Port Forwarding



4. Set Port Forwarding

**Predefined Rule**

Service  ?

**Add Rule**

Name  ?

Start Port  ? End Port  ?

Protocol  ?

IP Address   ?

**Name:** A name whatever you want for port forwarding

**Start Port:** the camera's port

**End Port:** the camera's port

**Protocol:** TCP

**IP Address:** the camera's IP address

Click **Add Rule**

## For Webtell Routers

1. Enter the internal IP address of your router in the address bar of web browser. For these routers, in general, it is http://192.168.200.1
2. Click **Security - Service - Port Forwarding**



3. Click **new custom service**

**Security > Services > Port Forwarding**

Current Profile: Default

new edit

Service Name: Select A Service

\* \* Denotes Custom Service

enable delete edit

UPnP Enable ☐

new custom service

\* If your firewall is enabled, the firewall rules take precedence over the Services.

static NAT

4. Add a new custom service

**Security > Services > Port Forwarding > New Custom Service**

Service Name: TENNIS

Protocol: both

Start Port: 81

End Port: 81

LAN Port: 81

Direction: in

Port Direction: dst

add done

**Service Name:** A name whatever you want for port forwarding  
Select the service you just added.

5. And click **static NAT**

**Security > Services > Port Forwarding**

Current Profile: Default

new delete edit

**Service Name** Age of Empires II: The Conquerors

UPnP Enable

**Service Name** **LAN**

ip camera 1 192.

new custom service

*\* If your firewall is enabled, you must manually configure the services.*

static NAT

delete

SSH Secure Shell  
Starcraft  
Starfleet Command  
SOF/SOFII  
Telnet  
Tiberian Sun & Dune 2000  
Tribes2  
Ultima Online  
Unreal Tournament Server  
USENET News Service  
VNC  
Westwood Online, C&C  
World Wide Web (HTTP)  
Xbox Live  
Yahoo Messenger Chat  
Yahoo Messenger Phone  
Custom Defined Service

**TEWIS**

6. Enter the IP address of the camera, click **Enable**.

**Static NAT**

Set up an IP address to be your default NAT destination.

Static NAT Device 94:44:52:95:7E:0E

or specify

IP Address 192.168.200.239

*All unsolicited inbound traffic will be sent to the above device.*

*Note: Static NAT and Single Static IP are mutually exclusive features.*

enable disable cancel

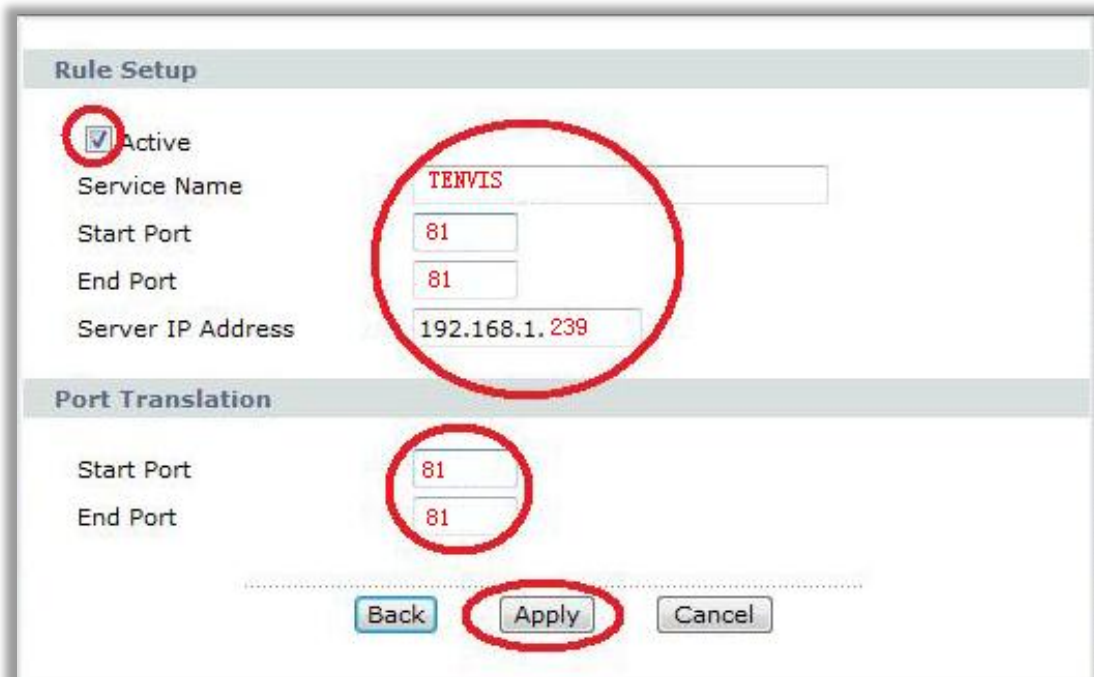
[Help](#)

## For Zyxel Routers

1. Enter the internal IP address of your router in the address bar of web browser. For these routers, in general, it is `http://192.168.1.254`
2. Click **Network - NAT**, and click **Port Forwarding**



3. Add a new rule



**Service Name:** It is just a name whatever you want for port forwarding

**Start Port:** the camera's port

**End Port:** the camera's port

**IP Address:** The camera's IP address

Click **Apply**